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ABSTRACT

There is a growing emphasis in tertiary education that students should develop professional skills as part of their education. Skills such as problem solving, communication, collaboration, interpersonal skills, social skills, and time management are actively being targeted by prospective employers as essential requirements for employability, especially in team environments. Of these, employment authorities consistently mention collaboration and teamwork as being critical skills, essential in almost all working environments. How then can students successfully practice teamwork in tertiary institutions in order to develop these skills? In this study, a group of final year multimedia students at Edith Cowan University (Australia) were investigated while completing a project-based unit, in which teamwork was an essential ingredient, couched in an authentic context. Student teams were required to develop World Wide Web sites for real clients, with teamwork processes supported with online tools to monitor progress and contributions. At the end of the semester, successful and unsuccessful teams (in terms of collaboration and teamwork) were interviewed and surveyed to determine essential factors that promoted success. A framework was developed from the literature based on students' emotional intelligence and propensity to engage in collaborative teamwork. It was found that there was a strong correspondence between students' emotional intelligence and team harmony. (Contains 20 references.) (Author/MES)

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DOES EMOTIONAL INTELLIGENCE AFFECT SUCCESSFUL TEAMWORK?

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Abstract

There is a growing emphasis in tertiary education that students should develop professional skills as part of their education. Skills such as problem solving, communication, collaboration, interpersonal skills, social skills and time management are actively being targeted by prospective employers as essential requirements for employability especially in team environments. Of these, employment authorities consistently mention collaboration and teamwork as being a critical skill, essential in almost all working environments. How then can students successfully practice teamwork skills in tertiary institutions in order to develop these skills?

In this study, a group of final year multimedia students were investigated while completing a project-based unit, in which teamwork was an essential ingredient, couched in an authentic context. Student teams were required to develop web sites for "real" clients; with teamwork processes supported with on-line tools to monitor progress and contributions. At the end of the semester, successful and unsuccessful teams (in terms of collaboration and teamwork) were interviewed and surveyed to determine essential factors that promoted success. A framework was developed from the literature based on students' Emotional Intelligence, and propensity to engage in collaborative teamwork. It was found that there was a strong correspondence between students' Emotional Intelligence and team harmony.

Keywords

emotional intelligence, teamwork, higher education, collaboration

Introduction

Attributes needed for successful teamwork can be viewed from different perspectives, ranging in nature from "Visible to Invisible" (Figure 1). A team member, who is the programmer, must have acceptable technical skills in programming. This skill can be tested for competence, and classified as a "visible skill" (Wysocki, Beck, & Crane, 1995). Also, having acceptable generic and team skills is highly desirable but not always easily testable i.e. testing for time management, problem solving or collaboration skills can be challenging? Another skill set, known as 'Emotional Intelligence' (Salovey & Mayer, 1990) is increasingly being promoted as being necessary for successful teamwork. Emotional intelligence consists of five main elements - self-awareness, self-regulation, empathy, motivation and social skills which are difficult to test for, and certainly are not as "visible" as technical skills. How important are each of these skills for team harmony and success?

In this study, teams of final year multimedia students worked together to develop web sites for "real" clients. Online tools were provided which helped scaffold teamwork and collaboration. At

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the beginning of the semester, an online "Student Contract" was provided which enabled team members to commit to roles, deliverables, a schedule and amount of time committed, which was signed by all team members and tutor. This was complemented with online weekly journals completed by all students that showed success in completing tasks, as well as a self/peer mark for all team members based on task completion, quality, contribution to team dynamics, and punctuality at team meetings. These journals were completed online and confidentially submitted to tutors, who then used this information to conduct "Tutor Led Peer Assessment Sessions" to make decisions about transferring marks between students.

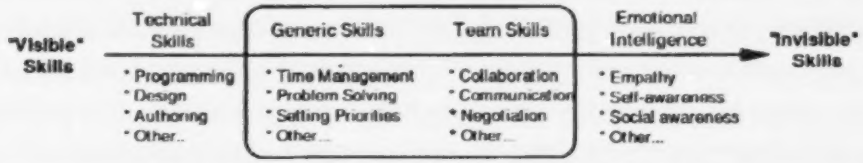

Figure 1: A spectrum of skills needed for teamwork

Twenty teams were involved in the project, from which two teams were investigated, one highly successful, and another, which had major collaboration problems and eventually was forced to split. These teams were interviewed, and comparisons were made to try and determine attributes that contributed to their success and failure.

Exploring Emotional Intelligence

The concept of emotional intelligence and its impact on teamwork is relatively new. Salovey and Mayer (1990) initially conceived the concept and coined the term Emotional Intelligence, which was derived from Gardner's (1983) theory of multiple intelligences. These included interpersonal and intrapersonal intelligence which were used by Salovey and Mayer (1990) to form the basis of the theory of emotional intelligence. Salovey and Mayer (1990) used this as a basis for their definition of emotional intelligence, which they define as the "ability to monitor and regulate one's own and other's feelings, and to use feelings to guide one's thinking and action" (p. 189). This definition identifies five main domains: knowing one's emotions, managing emotions, motivating oneself, recognising emotions in others and handling relationships.

Goleman (1998b) adapted Salovey and Mayer's (1990) model as a basis for his discussion of the theory of emotional intelligence and it's implications for everyday life including the world of work. He adapted Salovey and Mayer's emotional intelligence model to develop five emotional and social competencies: self-awareness, self-regulation, motivation, empathy and social skills. These are each discussed below.

Self-Awareness

Self-awareness is the ability to understand and interpret one's own feelings through internal reflection. The ability to be critical about thoughts and make changes to behaviour can lead to an in-depth understanding about one's self, which leads to a better understanding of others. Lanser (2000) places a strong emphasise on the importance of self-awareness in guiding and perfecting job performance, including interactions with colleagues and in the establishment of positive and productive leadership and teamwork skills. Team members need to be aware of their feelings as they may allow uncontrolled emotions to impact on the dynamics and culture of the team. Cherniss (1998) emphasises that effective team members are self-confident, which is reflective of their own emotional self-awareness, and ability to control their emotions.

Self-Regulation

Self-awareness of emotions enables team members to then practice self-regulation, which is the ability to use emotions to facilitate the progress of the task or the project (Goleman, 1998b; Lanser,

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2000). Being able to regulate emotions especially during conflict, pressure, stress and deadlines facilitates the smooth progress of the project and promotes positive, effective working relationships with other team members and clients. Goleman (1998b) explains that handling emotions and putting the task first rather than emotions aids in the attainment of the required goal.

Motivation

Being able to motivate fellow team members into contributing their best is very powerful. Workers are discretionary in their application to a project – they will only give if they feel they are being supported, nurtured and inspired. Successful teamwork requires intrinsic motivation, persistence and vision. Team members are not only responsible for their own motivation but are also play a key role in motivating the team and colleagues. Goleman (1998b) and Lanser (2000) propose that motivation is an essential element of emotional intelligence that pushes us forward through the positive and negative aspects of working life by showing initiative, perseverance and dedication, as well as being goal orientated, focussed and proactive.

Empathy

Goleman (1998b) contends that empathy is understanding and interpreting colleagues' feelings and being able to identify with their feelings on issues through understanding their perspective and cultivating rapport with people from different 'walks of life'. Empathic team members have an awareness of the diversity of personalities and are accepting of the diversity of people and the impact culture can have on interactions within a team environment. Book (2000), defines empathy as the "capacity to see the world from another person's perspective" (p. 45).

Social Skills

Social skills are essential for the development of positive, effective relationships with colleagues and the ability to interact with team members to deter conflict, be aware of, ease and dissipate underlying tensions that can accumulate and have a negative impact on working relationships and project success. Team members need to be able to stimulate cooperation, collaboration and teamwork through well-developed social skills (Goleman, 1998b).

Teamwork and Social Interdependence

Teamwork is defined by Harris and Harris (1996) as "…a work group or unit with a common purpose through which members develop mutual relationships for the achievement of goals/tasks" (p. 23). Teamwork implies that individuals work in a cooperative environment in the interests of a common goal by sharing knowledge/skills and being flexible enough to serve multiple roles. The literature consistently highlights that one of the essential elements of a team is its focus toward a common goal and a clear purpose (Fisher, Hunter & Macrosson, 1997; Johnson & Johnson, 1995, 1999; Parker, 1990). Many organizations rely upon successful teamwork to achieve goals and to meet the needs of clients. It is a synergistic process that relies upon all team members to contribute and participate in order to promote and nurture a positive, effective team environment. Team members must be flexible enough to adapt to working in a cooperative working environment where goals are achieved through collaboration and social interdependence rather than individualised, competitive goals.

Social interdependence refers to how individuals interact in cooperative learning or working situations, including team environments and is an integral part of cooperative learning. The relationship between successful teams, cooperative learning theory and social interdependence is strong (Johnson & Johnson, 1999). "Social interdependence exists when individuals share common goals; each individual's outcomes are affected by the actions of the others" (Johnson & Johnson, 1995; p. 206). The literature consistently highlights interdependence focussed toward a common goal as an integral element of an effective team (Fisher et al., 1997; Johnson & Johnson, 1995, 1999; Parker, 1990). Scarnati (2001) explains that teamwork that relies upon cooperative processes enables individuals to extend their boundaries and achieve more through social interdependence than as individuals. "The team has synergy. By sharing a common goal or vision, the team can accomplish what individuals cannot do alone" (p. 6).

Social interdependence can be considered to be positive, negative or non-existent (Johnson & Johnson, 1999). Johnson and Johnson (1995) explain that positive interdependence creates promotive interaction in which individuals encourage and facilitate each other's efforts to attain team goals, such as creating positive relationships and collaborative team environments. Negative interdependence or competition generally results in oppositional interaction. This occurs when individuals prevent others from achieving because of their own competitiveness. Rather than promoting a team environment through positive interaction, team members are focussed on "...increasing their own success and on preventing anyone else from being more successful then they are" (Johnson & Johnson, 1995; p. 212). No interaction occurs when individuals work independently without interacting with others. Individuals focus on increasing and improving their own success and have no regard or interest in the efforts of others (Johnson & Johnson, 1995).

Johnson and Johnson (1995, 1999) list essential attributes of positive interdependence needed for successful teamwork as follows: giving and receiving help and assistance for both task related and personal issues; exchanging resources and information; giving and receiving feedback on tasks and teamwork behaviours; challenging each other's reasoning; encouraging others to achieve; influencing each other's reasoning and behaviour; using interpersonal and social skills to enhance team work; and consciously reflecting on the effectiveness of the team to continue improvement and acknowledge achievements.

Team members need to be aware that negative behaviour can impact on work productivity and affect the overall success of the team and project. Conflict resolution and the ability of team members to deal with issues, feelings and emotions can impact greatly on the success of the team. Team members caring for one another, encouraging each other, showing empathy and regulating their emotions contribute to and have an impact on the success of the team. Harris and Harris (1996) explain that successful teams have a high level of maintenance and must incorporate essential 'invisible' skills such as caring for one another, showing warm feelings, friendliness and offering team members support when needed. Successful teams require both technical skills and interpersonal skills "...communication at both the cognitive and feeling levels is what determines the success or failure of the team" (Harris & Harris, 1996; p. 29). The importance of cooperative, positive interaction team environments and a discussion of the essential elements of successful teams and determining a link to emotional intelligence theory is the focus of this paper. The following section provides a synthesis of emotional intelligence literature and aims to provide links between successful teamwork and emotional intelligence.

Emotional Intelligence and Teamwork

From the above review, it was found that there was much commonality between successful teamwork and emotional intelligence. This is supported by Yost and Tucker (2000) who promote a strong relationship between successful teamwork and emotional intelligence and contend that emotional intelligence competencies are more important than the "Visible skill" set shown in Figure 1, such as technical competencies. There is more to effective teamwork than a keen intellect and grasp of technical knowledge. The difference between success and mediocrity in working relationships, especially in a team environment, can be attributed to a team member's mastery of the softer skills – abilities and approaches grounded in emotional intelligence. (Grossman, 2000; Tucker, Sojka, Barone, & McCarthy, 2000).

Positive, effective interpersonal relationships are an important element of successful teams. Emotional bonding that exists between team members has a profound effect on the work produced and the overall success of the project. Teams that care about each other at a personal and professional level are more likely to be successful than teams that ignore the importance of the relationship between positive interpersonal relationships, professional relationships and goal achievement. Developing positive relationships where team members are aware of the impact their emotions can play on the effectiveness and success of the team should be the aim of each team member. A positive emotional climate should be developed so that all energies can be focussed on

the attainment of mutual goals including the success of the project (Johnson & Johnson, 1999).

In order to promote positive, progressive, effective working environments, team members need to have a combination of technical knowledge and well-developed emotional intelligence including self-awareness, empathy, social awareness and be highly motivated and be able to inspire and motivate their colleagues. Table 1 links the attributes needed for successful teams with the emotional intelligence competencies defined by Goleman's (1998a) - self-awareness, self-regulation, motivation, empathy and social skills. These relationships were derived through a synthesis of the literature (Esquivel & Kleiner, 1996; Francis & Young, 1979; Harris & Harris, 1996; Johnson & Johnson, 1995, 1999; Yost & Tucker, 2000).

	Definition	Relationship to Successful Teamwork
Self-Awareness	The ability to recognise and understand your moods, emotions, and drives, as well as their effect on others	Having positive and productive teamwork skills Controlling emotions and understand the impact of emotions on the team Being self-confident, high self-esteem and a coherent and integrated self-identity Promoting psychological health including a happy disposition
Self-Regulation	The ability to control or redirect disruptive impulses and moods The propensity to suspend judgement – to think before acting	Being self-aware of emotions to enable self-regulation Handling emotions and putting the team task first Using emotions to facilitate the progress of the project Regulating emotions during conflict, pressure, stress and deadlines Coping with stress, frustrations through creating and contributing to caring, supportive relationships
Motivation	A passion to work for reasons that go beyond money or status A propensity to pursue goals with energy and persistence	Motivating other team members to contributing their best Openness, flexibility and motivation to change, innovation, creativity and collaborative problem solving Creating an environment that stimulates, enhances and empowers team members to become motivated and apply themselves fully Showing initiative, perseverance and dedication, goal orientation & focus Placing team or common goals ahead of individual goals and pursue these with determination and perseverance Having a sincere interest and motivation for the group and individual's achievements and goals Considering team morale and aiming to maintain a positive productive work environment
Empathy	The ability to understand the emotional makeup of other people Skill in treating people according to their emotional reactions	Understanding, interpreting and identifying with colleagues' feelings Cultivating rapport with people from different 'walks of life' Having the potential to turn adversarial relationships into collaborative alliances Showing emotional concern including reassurance and caring for other team members Helping to create a team environment where members can express their feelings
Social Skill	Proficiency in managing relationships and building networks An ability to find common ground and build rapport	Creating a team culture which is supportive, informal, comfortable, and non-judgemental Developing professional as well as positive personal relationships with other team members Developing intense, short-term relationships and being able to disconnect and work in another team environment with the same sincerity and motivation Being able to stimulate cooperation, collaboration and teamwork through well-developed communication and social skills Developing positive, effective relationships with colleagues through fostering trust, confidence and commitment Helping to establish a positive team climate and promoting support and respect for one another Having the ability to interact with team members and deter conflict, be aware of, ease and dissipate underlying tensions

Table 1: Emotional Intelligence (modified from Goleman 1998a) and attributes of successful teams

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Case Study

Final year students enrolled in the Interactive Multimedia course at Edith Cowan University are required to develop skills and expertise in managing the development of multimedia product. The unit IMM "Project Management Methodologies", uses teams of four or five students to develop a web site, in which students use their specialist skills within a team environment. Team roles include programmers, graphic designers and project managers. There were 82 students completing this unit, which was delivered through a custom built web site to enable both internal and external students access to resources, and also to enhance the quality of the learning environment. The unit consists of thirteen, three-hour class sessions conducted over a full semester.

Students were required to carefully consider their own and their peers' contributions each week through online journals that allowed team members to rate their own and their peers' performance confidentially online. These proved to be successful in helping tutors make decisions about transferring marks amongst team members.

Within this scenario, one team was highly successful in developing quality work, without any team problems. Their journal entries continually reflected positive comments about other team members, and at no stage during the semester was there a request or requirement to transfer marks from one team member to another. The students were always goal focussed, continually exploring expectations of the tutor and the unit requirements. This team had a strong sense of collaboration, and were content with their peers work.

Another team experienced problems, causing it to become dysfunctional and had to be split. By monitoring the online journals, team discrepancies were identified and marks were transferred between team members, though resentment amongst team members continued to escalate. The tutor had several meetings with the project manager and individuals to help resolve issues, but to no avail. At one of the team meetings a serious disagreement occurred, in which one of the team members verbally berated another, from which point there was no reconciliation. After this altercation, team members felt they could no longer work together, so even though they would experience a heavier workload, they unanimously agreed to split and form two separate teams.

One week after the team split, focus group interview sessions were organised. A questionnaire was developed based on Goleman's work (1995, 1998a, 1998b) with a view of determining aspects of emotional intelligence present within each of these teams. The interview sessions were taped and transcribed for analysis. A summary of the results is shown in Table 2, which illustrates each of the five emotional intelligences, as described by Goleman (1995). By looking through the responses given by each of the teams, it is evident that the successful team had a strong awareness of the impact of emotions on team success. In almost all of their responses, this team was highly focussed on delivering a quality product, and not pre-occupied by personal issues that could interrupt their objectives. Focussing on a common goal is an important element of positive interdependence. The team members felt that they had a responsibility towards the other members of the team and that the success of the project was based upon each team member's contribution. They recognised that team members had different personalities and experienced problems at different stages. They felt that it was a "healthy thing" to discuss and offer constructive help/criticism in trying to resolve problems. They were strongly aware of the consequences – the negative effect on the team and their common goal – if emotions were not controlled.

The results from the dysfunctional team showed a lack of emotional intelligence skills, as defined by Goleman (1995, 1998a, 1998b). Team members seemed unaware and very surprised that they had upset other team members. Comments made by team members indicated that peers were inconsiderate of their situation and problems, and were not inclined to discuss problems, as they would only attract criticism. This resulted in team members resenting each other, which eventually caused major disruption and caused the team to split. There was a lack of communication resulting in problems affecting the development of positive interaction based on positive interdependence. Rather than

the team as a whole having ownership of the project one team member felt that he was not included in decision-making and did not receive all communication regarding the progress and development of the project leading to miscommunication and resentfulness. This caused a lack of team cohesion and cooperation, a feeling of disempowerment, and resulted in the eventual split of the team.

The data showed the dysfunctional team having oppositional interaction or negative interdependence (Johnson & Johnson, 1995, 1999). Some team members were highly competitive and this negated the development of a synergistic team environment. After analysing the data it was obvious that negative interdependence was not the only reason for the dysfunction of the team; the lack of emotional intelligence was the main reason for the team being unsuccessful.

An individual student questionnaire was also given to all of the team members in both teams, after the focus interview questions. Students were asked to fill out a Likert scale based on questions related to Goleman's (1998) five emotional intelligences. An average of all the scores was taken to compare how students rated themselves against their peers. As shown in Figure 2, the functional/successful team clearly outscored the dysfunctional team in their responses.

They rated themselves and their peers highly, showing a marginally higher score for their peers, over their own. Whereas, the dysfunctional team, showed overall lower scores, and ranked their own/self emotional intelligence scores higher than their peers. This indicates that the dysfunctional team recognised that they did not have strong emotional intelligence attributes, though on average considered self better than their peers. This may be related to some of the "unconscious" miscommunications uncovered through the interviews i.e. these students *truly* believed that they were showing consideration toward others, but their peers did not perceive it this way.

By analysing the summarised interview and the survey results, it was evident that students in the dysfunctional team had lower skills in self-awareness, self-regulation, motivation, empathy and social skills. The in-depth interviews revealed clear differences between the two teams in these areas, which had a major impact on the quality of the final product and functionality of the team. In this study, it was clearly evident that a lack of emotional intelligence skills such as taking issues personally, not being aware of others feelings, not controlling feelings and others shown in Table 2, directly contributed to the team becoming dysfunctional.

	Functional Team	Dysfunctional Team
Self-Awareness	Team was aware of their emotions and the possible impact they could have on the team Team members tried to sort out problems as soon as possible by trying to be aware of others problems	Team members seemed unaware of the impact their behaviour had other team members When problems occurred teams members tended to take it personally Team-members didn't predict that comments would upset others
Self-Regulation	Team was product focused, and regulated their emotions so that they did not have a negative impact on the product The team facilitated the smooth progress of the project and promoted positive working relationships with team members to get the job done	Team-members did not realise they had upset peers, and didn't seem to understand the effect the emotional outburst had on the rest of the team Team members didn't control their emotions well under pressure and reacted quickly to trivial situations In communicating problems, team members were overly emotional and personal
Motivation	Team members felt comfortable and supported in discussing their problems The team created a positive and motivating team environment. They tried to motivate team members with constructive criticism The team was very goal oriented and focused on the "big picture"	The team didn't create an empowering environment, to allow all members freedom of expression and encouragement to contribute Team members lost motivation, especially when their work criticised in a negative fashion
Empathy	Team members had previously worked with others and knew when others were getting upset, which helped to deter conflict Team members felt supported in discussing their problems Team members respected different personalities, cultures and sensitivities	Could see that a team member was angry and upset, but didn't make any effort to try and understand why the team member was angry Some team members were aware of each others feelings, particularly when some were getting upset Team members considered others inadequacies as "downfalls" rather than something they could help them with The team didn't consider everybody's needs during planning sessions Some team members felt alienated and didn't feel part of team
Social Skill	The team never took issues in a personal manner, as it would detract from developing a quality final project The team felt that talking about or communicating problems to each other was a "healthy thing" The team felt that developing a healthy working environment with good relationships was important. They often socialised together	Lack of communication was evident in the team. For example, some team members believed that were making allowances for different learning styles, but this wasn't perceived that way The team did not communicating their feelings, which resulted in resentment and bad feelings to others

Table 2: "Comparative" Emotional Intelligence data summary

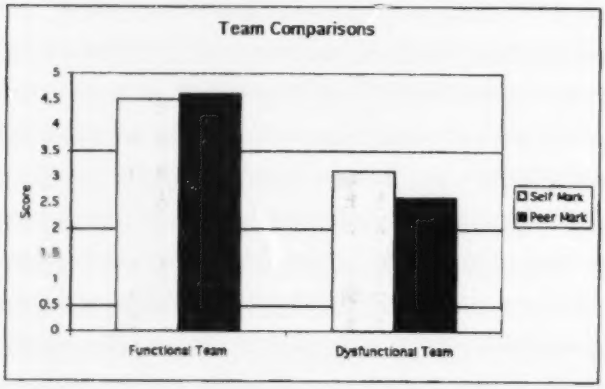

Figure 2: Comparing likert scale survey data

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Summary and Conclusions

This study analysed the team dynamics of a successful and dysfunctional team. The successful team was highly motivated to produce a quality product, and not pre-occupied by personal issues. This team felt that it was appropriate and healthy to discuss problems as they arose so that the final product would not be compromised, and they could get on with the job. This team displayed characteristics of positive interdependence and promotive interaction. However, the dysfunctional team demonstrated negative interdependence, poor communication, lack of consideration, empathy and understanding.

Using the attributes provided by Goleman (1995, 1998a, 1998b), it was evident that team members' emotional intelligence played a pivotal role in determining the success and functionality of the team, and the quality of final product being developed. It would appear that emotional intelligence skills underpin collaboration and communication skills needed for managing conflict and keeping the team focussed on developing the required product.

At a time when generic skills are being strongly promoted by employers and government funding authorities, it would be appropriate to further investigate this line of research in the affective domain. Further research in this area will be focussed on developing:
An evaluation instrument used to assess students' emotional intelligence at the beginning of the semester, to help advise students on how best to implement strategies to help with teamwork;
More focussed and probing interview questions needed to help uncover greater detail about underlying issues related students' emotional intelligence (lack and awareness of); and
More detailed procedures for tutors to use when running tutor led peer assessment sessions.

The results of this study show a compelling relationship between students' emotional intelligence and their ability to work effectively within a team. This has important implications for all discipline areas, where collaborative teamwork is incorporated as part of the learning environment. Visible skills and emotional intelligence should both be considered when selecting team members for a collaborative environment. Lecturers, tutors and students need to be made aware of emotional intelligence and the impact it can have on team success.

References

Book, H.E. (2000). One big happy family - the emotionally intelligent organization. *IVEY Business Journal,(Sept/Oct)*, 44-47.

Cherniss, C. (1998). Social and emotional learning for leaders. *Educational Leadership, 55* (7), 26-28.

Esquivel, M.A. & Kleiner, B.H. (1996). The importance of conflict in work team effectiveness. *Team Performance Management: An International Journal, 2* (3), 42-48.

Fisher, S.G., Hunter, T.A. & Macrosson, W.D.K. (1997). Team or group? Managers' perceptions of the differences. *Journal of Managerial Psychology, 12* (4), 232-242.

Francis, D. & Young, D. (1979). *Improving work groups*. San Diego, California: University Associates.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books.

Goleman, D. (1998a). What makes a leader? *Harvard Business Review, 76*, 93-102.

Goleman, D. (1998b). *Working with emotional intelligence*. New York: Bantam Books.

Grossman, R.J. (2000). Emotions at Work. *Health Forum Journal,(Sept/Oct)*, 18-22.

Harris, P.R., & Harris, K.G. (1996). Managing effectively through teams. *Team Performance Management: An International Journal, 2* (3), 23-36.

Johnson, D.W., & Johnson, R.T. (1995). Social interdependence - Cooperative learning in education. In B. Bunker & J.Z. Rubin (Eds.), *Conflict, cooperation, and justice*. (pp. 205-251). San Francisco: Jossey-Bass Publishers.

Johnson, D.W., & Johnson, R.T. (1999). *Learning together and alone: Cooperative, competitive,*

and individualistic learning (5th ed.). Needham Heights: Massachusetts: Allyn and Bacon.

Lanser, E.G. (2000). Why you should care about your emotional intelligence. *Healthcare Executive,(Nov/Dec),* 6-11.

Parker, G.M. (1990). *Team players and teamwork*. San Francisco, CA: Jossey-Bass.

Salovey, P., & Mayer, J.D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9* (3), 185-211.

Scarnati, J.T. (2001). On becoming a team player. *Team Performance Management: An International Journal, 7*(1/2), 5-10.

Tucker, M.L., Sojka, J.Z., Barone, F.J. & McCarthy, A.M. (2000). Training tomorrow's leaders: Enhancing the emotional intelligence of business graduates. *Journal of Education for Business, 75* (6), 331-337.

Wysocki, R.K., Beck, R., & Crane, D.B. (1995). *Effective project management. How to plan, manage, and deliver projects on time and within budget*. New York: John Wiley & Sons, Inc.

Yost, C.A., & Tucker, M.L. (2000). Are effective teams more emotionally intelligent? Confirming the importance of effective communication in teams. *Delta Pi Epsilon Journal, 42* (2), 101-109.

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